

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054283 A3

- (51) International Patent Classification⁷: C12Q 1/37, C07K 14/415, G01N 33/573, 33/569
- (21) International Application Number: PCT/EP2004/013555
- (22) International Filing Date: 30 November 2004 (30.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 03027637.2 2 December 2003 (02.12.2003) EP
- (71) Applicant (for all designated States except US): BASF Aktiengesellschaft [DE/DE]; 67056 Ludwigshafen (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): EHRHARDT, Thomas [DE/DE]; Maulbronner Hof 49, 67346 Speyer (DE). REINDL, Andreas [DE/DE]; Brunhildestr. 24, 68199 Mannheim (DE). FREUND, Annette [DE/DE]; Römerweg 17c, 67177 Limburgerhof (DE). SCHMIDT, Ralf-Michael [DE/DE]; Am Schlossgarten 9d, 67489 Kirrweiler (DE). SONNEWALD, Uwe [DE/DE]; Am Hange 6, 06484 Quedlinburg (DE). STITT NIGEL, Marc [DE/DE]; Grosse Weinmeisterstr. 22a, 14469 Potsdam (DE). LEIN, Wolfgang [DE/DE]; Geschwister-Scholl-Str. 95, 14471 Potsdam (DE). BÖRNKE, Frederik [DE/DE]; Am heiligen Brunnen 2, 06484 Quedlinburg (DE). DEIST, Kirsten [DE/DE]; Akazienweg 20, 06449 Westdorf (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
- with international search report
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 1 September 2005
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CLP-PROTEASE AS TARGET FOR HERBICIDES

(57) Abstract: The present invention relates to Clp-protease, which, when absent, brings about reduced growth and chlorotic leaves as target for herbicides. For this purpose, novel nucleic acid sequences encompassing SEQ ID NO:3, SEQ ID NO:11 and SEQ ID NO: 17 and functional equivalents of SEQ ID NO:3, SEQ ID NO:11 and SEQ ID NO: 17 are provided. Moreover, the present invention relates to the use of Clp-protease in a method for identifying compounds with herbicidal or growth-regulatory activity, and to the use of the compounds identified by this method as herbicides or growth regulators.



WO 2005/054283 A3